



MARSHALL STAR

Serving the Marshall Space Flight Center Community

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Augustine panel visits Huntsville to discuss future of human spaceflight



Marshall Center Acting Director Robert Lightfoot, standing at left, describes the center's capabilities and portfolio to the U.S. Human Space Flight Plans Committee.

By Jennifer Morcone

On July 29, Huntsville hosted a public meeting of the U.S. Human Space Flight Plans Committee. The panel, appointed by the White House Office of Science & Technology Policy, is conducting an independent review of ongoing U.S. human spaceflight plans and programs and alternatives, to ensure the nation is pursuing the best trajectory for the future of human spaceflight – one that is safe, innovative, affordable and sustainable.

Norman Augustine, former chairman of Lockheed Martin Corp., chairs the 10-member committee. The group is

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STS-125 crew visit today

Space shuttle astronauts who flew the STS-125 mission to repair and upgrade NASA's Hubble Space

Telescope will present highlights of their May mission today in Morris Auditorium at 1 p.m.

An autograph session will follow from 2-2:30 p.m.



End of an era

Space Shuttle Program conducts last planned space shuttle main engine test at Stennis

By Sandra Martel

More than 34 years ago, on June 27, 1975, engineers at the Stennis Space Center near Bay St. Louis, Miss., conducted the first test on one of the world's most sophisticated rocket engines – the space shuttle main engine – which was developed and is managed by engineers at the Marshall Space Flight Center.

After more than three decades, the last planned main engine test, conducted on July 29, marked the end of an era for a test program that has powered the nation's Space Shuttle Program. The space shuttle is set to retire next year.

During the test program, about 50 main engines have been certified for use on almost 130 shuttle missions. An

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Space shuttle Endeavour glides home after successful mission

After a 16-day mission to the International Space Station, space shuttle Endeavour touches down at NASA's Kennedy Space Center, Fla., July 31. For more information about the STS-127 mission, visit http://www.nasa.gov/mission_pages/shuttle/main/index.html.



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expected to deliver a set of options to NASA Administrator Charles Bolden and the White House by Aug. 31.

The all-day meeting took place at the U.S. Space & Rocket Center and drew a crowd of 250 attendees. Agenda topics included Marshall Space Flight Center operations, NASA's Constellation Program, committee subgroup reports, congressional perspectives and public comments.

Robert Lightfoot, acting director of Marshall, began the day by describing the center's capabilities and portfolio. Steve Cook, Ares Projects manager, provided an overview of the Ares vehicles, work force and schedule. Each of the Ares element managers, including Alex Priskos, First Stage manager; Danny Davis, Upper Stage manager; and Mike Kynard, Upper Stage Engine manager, highlighted Ares I progress and recent accomplishments. Joe Fragola, vice president of Valador Inc., a NASA contractor with headquarters in Herndon, Va., provided a technical analysis of the safety profile of the Ares I vehicle.

Dr. John Hutt, Ares I Vehicle Integration chief engineer, reported on progress on key risks. Stephan Davis, deputy manager of the Ares I-X mission, provided a status report on the upcoming test flight. Steve Creech, Ares V Integration manager, spoke to the commonalities between Ares I and Ares V and the flexibility of missions enabled by the heavy lifter.

Five members of Congress from Alabama submitted statements or video messages to the committee, including Sens. Richard Shelby and Jeff Sessions, and Reps. Robert Aderholt, Parker Griffith and Artur Davis of Alabama's 4th, 5th and 7th districts, respectively.

In addition to listening to information from NASA, two



Marshall Center Acting Director Robert Lightfoot speaks to the U.S. Human Space Flight Plans Committee about how the center's organizations are working to fulfill NASA's mission.

committee subgroups deliberated during the session. Bo Bejmuk, chair of the Low-Earth Orbit Access Subgroup, and retired Gen. Lester Lyles, chair of the Integration Subgroup, led discussions.

The meeting concluded with a public comment period. Huntsville Mayor Tommy Battle and "Rocket Boys" author and former NASA engineer Homer Hickam were among those who provided statements to the committee.

Immediately following the public meeting, Augustine held a press conference with local reporters. WAFF-TV anchor Liz Hurley asked, "What do you tell those at Marshall and other contractors who feel in limbo?"

Augustine responded, "I have been in their shoes before, and I can share that it is not a pleasant experience. I regret, I think all of us do, that there is uncertainty that has been introduced here. What I would say to the people who work so hard here [at Marshall] is to keep working.

We are going to do our very best to do the right thing, as I am sure the leaders of our country will. And we can all, I think, take great pride in what you are doing and what you will do."

The committee is planning two additional public meetings in Washington on Aug. 5 and 12. The meetings will be broadcast live on the NASA TV media channel and may be viewed online at <http://www.nasa.gov/ntv>.

For more information about the committee, visit <http://hsf.nasa.gov>.

To read the charts from the Huntsville meeting, visit the Marshall Newsroom homepage at www.nasa.gov/centers/marshall/news/index.html.

Morcone is a public affairs officer in the Office of Strategic Analysis & Communications.

H1N1 flu update status

Novel influenza H1N1, known as swine flu, is still spreading in the United States. With the approach of the fall and winter flu season, it is time to remind Marshall Space Flight Center team members that the virus is still a threat, and we can expect to see increased numbers of cases.

The following offers a reminder of generally recommended precautions, and specific actions to take in certain situations. These guidelines are based on recommendations from the Centers for Disease Control.

Symptoms of novel H1N1 influenza

Although the symptoms of the H1N1 flu are similar to seasonal flu, it is important to remember that the main difference between the two is that H1N1 is a new virus. Therefore, it has potential to spread quickly and more thoroughly than seasonal flu. Persons over 65 years old do seem to have some protective immunity to this pandemic flu.

The H1N1 virus can be identified by laboratory testing; however, the test takes several days. Thus, during a pandemic, testing often is not a practical tool for clinical decision making regarding an individual case. Because of this, it is important that everyone be aware of symptoms of the virus, which include fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills and fatigue. Diarrhea and vomiting also have been reported.

General precautions in the workplace

Marshall team members need to work together to minimize the spread of the virus within the working population. The virus is spread from person to person primarily by inhaled viral particles from within 6 feet of an infected person's coughing or sneezing, or by touching a contaminated surface and transferring viral particles to the eyes or mouth.

Team members should frequently wash their hands with soap and water, or use an alcohol-based hand sanitizer, especially after participating in group activities or spending time in common areas such as bathrooms, conference rooms and cafeterias.

Because the virus has demonstrated the ability to remain viable for up to eight hours on inanimate surfaces such as keyboards, doorknobs and countertops, these surfaces should be cleaned with common household disinfectants regularly and after increased crowd contact.

Marshall's Emergency Operations Center and the Marshall Medical Center will continue to offer information, reminders and guidance as appropriate.

Specific recommended actions for employees in various situations

Marshall team members should stay home if they are sick. An infected person is contagious for seven days after

the onset of illness. If symptoms are of a flu-like illness, stay home for seven days after symptoms begin or for 24 hours after symptoms have cleared.

Team members who begin experiencing flu symptoms while at work should notify their supervisors and go home as soon as possible. Those who have an underlying medical condition or who are pregnant should call their health care provider for advice, because they might need to receive influenza antiviral drugs to prevent or reduce the severity of the illness.

Do not go to the Marshall Medical Center for evaluation or treatment, but do contact the Medical Center at 544-2390 for illness-tracking purposes. This applies to all Marshall team members, contractor or civil service employees, who contract an influenza-like illness whether at home or work. By maintaining information regarding the severity of the influenza outbreak within the Marshall community, the medical director can advise management as the situation changes.

If a team member is ill, but is required to remain at work to fulfill a mission, the Marshall medical director should be contacted to assist with implementation of measures specific for that worker and work group that can minimize exposure to others.

Team members who are well but who have an ill family member at home with a flu-like illness can go to work as usual. These employees should monitor their health every day. If they become ill, they should notify their supervisor and stay home.

During periods of heightened influenza prevalence, any worker who returns from travel should consider themselves exposed. These employees should monitor their health every day. If they become ill, they should notify their supervisor and stay home.

When the virus is prevalent in the community, avoid crowds as much as possible, especially people who are coughing or sneezing. If team members suspect they have been exposed to a sick person, they can continue to go to work, but should monitor their health closely and proceed as directed above.

Basic health tips

- Cover nose and mouth with a tissue when coughing or sneezing. Dispose of tissues in trash after each use.
- Wash hands with soap and water, especially after coughing or sneezing.
- When around others, or in common areas, avoid touching the eyes, nose or mouth, which can introduce infection if the virus is on the hands or fingers.

NASA debuts Ares I five-segment development motor



On July 20, NASA unveiled the five-segment development motor, or DM-1, for the Ares I rocket at ATK Space System's test stand in Promontory, Utah. Preparations are under way for the first full-scale, full-duration ground test Aug. 25. The DM-1 will power the Ares I first stage, managed by the Ares Projects at the Marshall Space Flight Center. The test firing of the motor will provide NASA with valuable thrust, roll control, acoustics and vibration data as engineers continue to design the Ares I rocket. The Ares I will launch astronauts on future missions of exploration beyond Earth orbit. The motor is being developed by ATK Space Systems, a division of Alliant Techsystems of Brigham City, Utah, the prime contractor for the Ares I first stage.

Classified Ads

To submit a classified ad to the Marshall Star, go to Inside Marshall, to "Employee Resources," and click on "Employee Ads — Submit Ad." Ads are limited to 15 words, including contact numbers. No sales pitches. Deadline for the next issue, Aug. 13, is 4:30 p.m. Thursday, Aug. 6.

Miscellaneous

Miller Diversion 165 Tig welder, \$1,100. 534-1461
Glass-top kitchen table, seats six, two arm chairs, \$1,000; baker's/wine rack, two marble shelves, \$600. 656-0826
Ruger Single Six, stainless, 5.5 inch barrel, .22LR and .22WMR convertible, \$350. 971-0571
Oak entertainment center, 58"Hx 60"Wx21"D", \$350.00. 508-5416
Baby crib, changing table, box, \$700 obo; Guitar Hero Legends of Rock Bundle PS3, \$60. 716-4657
Craftsman Professional Routing Center, \$100; solid-oak gossip bench, \$100. 679-9383
Coffee table, two end tables, \$80; exercise rider, \$25; miscellaneous coolers, \$5-\$12. 777-8595.
Twin beds, pine headboards/footboards, mattresses, box springs, \$250; porch swing, white, 4 feet, \$50. 337-4315
Sunquest commercial tanning bed, requires 220V outlet, \$1,500. 755-1580
36-inch Magnavox Digital TV, tube, \$250 obo. 425-8467

MJ312 Baldwin organ, 1969 Leslie speakers, 1965 console stereo. 881-9422
Pit Bull puppies, 6 weeks old, parents on premises, \$100 each. 227-6540
Thermos Grill2Go Fire + Ice roll-around combination propane grill/ice chest, \$100. 233-0705
Bunk bed, twin over full, contemporary metal, black finish, \$50. 880-9169
Golf driver covers, Callaway Big Bertha Hawkeye VFT, 9 and 5, \$3 each. 797-7829
Dyna-Glow portable kerosene heater, 22k BTU, \$65. 880-7381
Twin bed, mattress, box spring, frame, \$50. 565-6499
Yamaha GH1 5' 3" grand piano, serial B5614673, black, high-polish finish, \$8,000. 931-625-0671
Executive credenza/file cabinet, solid wood, four extra large file drawers, extended desk top, \$100. 895-2959
Canon Digital Rebel XT SLR camera, 18-55mm and 55-250mm IS lenses, battery charger, more, \$800. 585-0500
Bristol Dragway reserved camping spot/car pass, Aug. 22 NASCAR Sharpie 500 race, Bristol, Tenn., \$170. 585-0500
Grundig stereo console SO360 U/S, circa 1961, needs work, radio, turntable, \$25 obo. 426-9983

Vehicles

2008 Chevy Tahoe LS, black, factory warranty, 35k miles, \$26,900. 423-309-8926
2007 Yamaha FX HO waverunners, two, 40 hours, \$16,500 obo. 714-4040
2007 Outback Sydney 31RQS travel trailer, sleeps 10, \$21,500. 797-1568
2006 Chrysler Pacifica Touring, red, third row, 24k miles, \$14,500. 797-1300
2005 F-150 Lariat, extended cab, bed cover, extras, \$16,700. 722-8064

2005 Fisher Freedom Deluxe 22-ft. pontoon boat, 115 HP Mercury motor, trailer, \$16,000. 655-0599 or 582-8559
2005 Yamaha Grizzly 4x4 4-wheeler, \$3,900. 302-3064
2004 Motorhome, R-Vision 33' Class-A, workhorse chassis, extended warranty, www.thewilletfamily.com/rv, \$55,000. 883-7021
2002 Thunderbird, two tops, stand, factory cover, lift system, 40,123 miles, \$22,500. 582-0869
2002 Lexus RX300, AWD, navigation, blue, tan interior, 156k miles, \$10,900. 679-3342
2000 Nissan Maxima SE, loaded, 159k miles, \$5,500. 302-3064
2000 Saturn, red, four door, \$3,500. 468-9377
BassTender 9.4 bass boat, battery storage, live well, Minn Kota trolling motor, more, \$800. 973-670-0880
1998 Stingray RS180, NEW 140hp I/O, seats seven, new trailer tires, ski equipment, \$10,000. 640-6427
1998 Javelin bass boat, 200 Evinrude motor guide/trolling motor, hummingbird fish finder. 565-7990
1993 F350 pickup, four door, 2WD, 460 gas (7.5ltr), cold AC, \$3,499. 723-8877
1985 Toyota Landcruiser, 6 cylinder, manual, extras, \$4,000. 658-8241

Wanted

Washer and dryer. 883-2757
Golf cart that seats four, canoe, both in very good condition. 612-2266
Electrical work to do, wiring houses, garages, yard lights, adding/removing switches, plugs, lights. 468-8906
Houses to clean, provide elderly assistance. 651-4723
Reader/writer box for Bernina embroidery machine. 837-6776

Marshall Center and Redstone to hold 'Countdown to Danger' emergency exercise Aug. 13

By Amie Cotton

The Marshall Space Flight Center and Redstone First Responders team will conduct an emergency exercise Aug. 13 from 8 a.m. to noon.

The "Countdown to Danger" exercise will simulate an emergency incident in the Building 4670 test stand area. The purpose of the exercise is to test Marshall's emergency plan and response to a test stand incident. Building 4670 and adjoining buildings will be used for the exercise.

The exercise scenario will include a simulated fire and explosion during an engine test following routine equipment assembly operations. In the exercise, at least five test stand team members will be injured and one employee trapped on the test stand by smoke and fire. First Responders will establish and operate an Incident Command Post at the test stand and practice incident responses.

The exercise will be supported by Marshall's Office of Human Capital, Office of Procurement, Engineering Directorate, Safety and Mission Assurance, and Center Operations, as well as HEMSI, the Redstone Fire Department and the Redstone Police.

"Marshall has an emergency plan that establishes policies, responsibilities and authority for safeguarding our personnel and equipment in the event of a man-made or natural disaster," said Bob Devlin, deputy director of the Center Operations Office and director of the Aug. 13 exercise.

"This emergency exercise will serve as a comprehensive dry run for our emergency plan: simulating casualties, medical evacuation, alerting and accounting for employees," Devlin said. "It gives our team the opportunity to work together and gain experience using multiple communications systems and procedures."

During the simulated incident, the Protective Services Office will test a new Web and phone communication tool called "Send Word Now" designed to alert Marshall team members of an incident or emergency and instruct them to report their status. During the test, West Test Stand area workers will receive an e-mail and a phone call from the new system. The messages will inform them of the incident and instruct them to contact their supervisors – thereby

helping to account for all personnel in the vicinity of the incident.

"Send Word Now is a reverse 911 system that is used by municipalities – including New York City – and by colleges and universities around the country," said Justin Jackson, physical security team lead in the Protective Services Office. "The system can send emergency alerts and other messages to all employees or to selected individuals via phone, text, e-mail and Blackberry Pin. The system has been in place at Marshall and Michoud Assembly Facility in New Orleans for almost a year and we continue to find new and better ways to use it."

The Office of Human Capital will be implementing a comprehensive personnel accountability process during the emergency exercise. Send Word Now is one component of the process. "During emergencies, the ability to quickly account for the status of personnel is critical," said Danny Hightower, manager of Human Resources Services Office, part of the Office of Human Capital.

Hightower noted the personnel accountability process is as follows:

In the event of an emergency, a Send Word Now alert will be sent to affected Marshall employees. Civil service employees will be advised to immediately contact their team leader or first-level supervisor and provide a status report of their location and condition. If the team leader or first-level supervisor is not available, the employee will contact their next available supervisor. Marshall contractor employees, including subcontractors, will be advised to contact their contractor supervisor in a similar manner.

After the alert is sent to affected employees, the team leader or supervisor will provide hourly status reports to their organization's Personnel Accountability Point of Contact until all employees are accounted for in their specific organization.

The designated point of contact will provide consolidated hourly reports to their Center Continuity of Operation, or COOP, Management Team representative until all affected employees in the organization are accounted for. Prime contractor points of contact will provide consolidated hourly reports, including accountability information on their subcontractors, to the Procurement Office Center COOP Management Team representative.

"Emergency preparedness for a federal site this large is imperative," Devlin said. "The 'Countdown to Danger' emergency exercise will bring our collaborative team together to practice emergency procedures and ready them to provide expeditious courses of action to minimize the effects of an emergency or disaster on center personnel and property."

Cotton, an AI Signal Research Inc. employee, supports the Office of Strategic Analysis & Communications.

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engine can be used to power more than a dozen flights before being retested.

"While the recent test marks the final planned hot fire test of a space shuttle main engine on Test Stand A2, the Stennis team will continue to play a vital role supporting the remaining space shuttle flights," said Jerry Cook, Space Shuttle Main Engine Project Manager at the Marshall Center. "The heart and soul of space shuttle main engine testing has been, and will continue to be, the dedicated Stennis Space Flight Center test team.

"Without their hard work, dedication and sacrifices, we would not be able to continue to push the envelope of liquid rocket engines," Cook added.

"It would be difficult to overstate the role Stennis has played in our nation's space program for the last 34 years," said Stennis Center Director Gene Goldman. "Its workers have created an unparalleled legacy of engine testing excellence."

"The excellent flight record of the space shuttle main engine can be largely attributed to the test team at Stennis," said Ronnie Rigney, acting space shuttle main engine test project manager at Stennis. "We have performed more than 2,000 tests, totaling more than 1 million seconds of accumulated hot-fire time in support of the development, certification, acceptance and anomaly resolution for the space shuttle main engine."

At one time, all three test stands at Stennis were involved in shuttle engine testing. Today, testing for the program has continued on the A-2 Test Stand, while Stennis engineers prepare the A-1 Test Stand for testing the J-2X engine currently in development. That engine soon will help power the next-generation Ares I and Ares V rockets that will take humans back to the moon and beyond.



Steam billows from the test stand at Stennis Space Center near Bay St. Louis, Miss., during a July 29 space shuttle main engine test.

NASA assigned Stennis to test space shuttle main engines in 1971. Prior to the first shuttle flight, Stennis engineers conducted some 500 tests on the engine and its components. They also test-fired the three-engine cluster arrangement – the main propulsion test article – that is used to power the shuttle, an accomplishment some called the facility's "finest hour."

In single-engine and cluster testing alike, the goal was the same: 8.5 minutes of successful firing, duplicating the amount of time it takes the engines to power the shuttle from launch to orbit.

"Stennis Space Center is truly unique in that propulsion test operations expertise has been passed from generation to generation through the Apollo and Shuttle programs since the mid-1960s, making this work force one of the most knowledgeable in its field," Rigney said. "This last test of the space shuttle main engine represents great accomplishments for this team, as well as new opportunities and challenges to transition to a new era in the nation's space program."

Martel, an AI Signal Research Inc. employee, supports the Office of Strategic Analysis & Communications.

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